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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,862	11/26/2002	Edward Demarest	DSC-02043	3385
31661	7590	02/07/2006	EXAMINER	
PROTON ENERGY SYSTEM 10 TECHNOLOGY DRIVE WALLINGFORD, CT 06492			LARKIN, DANIEL SEAN	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,862

Applicant(s)

DEMAREST ET AL.

Examiner

Daniel S. Larkin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 and 13-61 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 26 November 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. Receipt is acknowledged of a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e) and a submission, filed on 16 November 2005.

Drawings

2. The drawings are objected to because of the following:

The drawings are copies of original drawings and these copies show hole-punched marks. Additionally, some of the numbers are hard to identify because the numbers and other descriptions are not of equal weight.

Reference numeral -- 116 --, as shown in Figure 1B, should be more clearly written because this numeral looks very similar to 118, which is also shown in the figure.

Reference numeral -- 32 -- should be used to represent the oxygen and water conduit that exits from the top of the first phase separator 28, as shown in Figure 3, like all the other figures shown in the application.

Reference numeral -- 30 -- should be used to represent that valve underneath the first phase separator 28, as shown in Figure 5, like all the other figures shown in the application.

Reference numeral -- 80 --, as shown in Figure 7, should be more clearly written because this numeral looks very similar to 88.

The drawings fail to show the "recycling" of the water from the second phase separator to the electrochemical cell (18), as first described on page 11, paragraph [0043], line 5.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

Reference numeral -- 53 --, as shown in Figure 2C, does not appear within the written specification describing Figure 2C.

Reference numeral -- 59 --, as shown in Figure 2D, does not appear within the written specification describing Figure 2D.

Reference numeral -- 68 --, as shown in Figure 2D, does not appear within the written specification.

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:

Page 1, paragraph [0002], line 2: The article -- a -- should be inserted prior to the term "gas".

Page 1, paragraph [0002], line 4: The second occurrence of the article "a" should be corrected to read -- an --.

Page 2, paragraph [0004], line 3: A -- comma -- should be inserted prior to the term "such".

Page 2, paragraph [0006], line 2: A -- comma -- should be inserted prior to the term "respectively".

Page 3, paragraph [0007], line 3: A -- comma -- should be inserted after the numeral "24".

Page 3, paragraph [0007], lines 11 and 12: The "period" should be replaced with

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a -- comma --; and the term "This" should be corrected to read -- this --.

Page 3, paragraph [0009], line 1: The term -- are -- should be inserted prior to the term "systems".

Page 3, paragraph [0009], line 5: The "comma" after the term "and" should be deleted.

Page 3, paragraph [0010], line 1: The article "a" should be corrected to read -- an --.

Page 3, paragraph [0010], line 6: The "comma" after the term "and" should be deleted.

Page 4, paragraph [0011], line 1: The article -- a -- should be inserted prior to the term "system".

Page 4, paragraph [0011], line 3: The "comma" after the term "and" should be deleted.

Page 4, paragraph [0012], line 1: The term "that" should be deleted.

Page 4, paragraph [0012], line 5: The "comma" after the term "and" should be deleted.

Page 4, paragraph [0013], line 3: The "comma" after the term "and" should be deleted.

Page 4, paragraph [0014], line 3: The "comma" after the term "and" should be deleted.

Page 4, paragraph [0015], line 4: The "comma" after the term "and" should be deleted.

Page 5, paragraph [0016], line 2: The "comma" after the term "and" should be deleted.

Page 5, paragraph [0025], line 2: The "comma" after the term "and" should be deleted.

Page 6, paragraph [0030], line 1: The term "of" should be deleted; and the first occurrence of the term "in" should be corrected to read -- is --.

Page 7, paragraph [0030], line 2: A -- comma -- should be inserted prior to the term "such".

Page 7, paragraph [0031], lines 2 and 4: This sentence does not make sense. Figure 2B shows the tube 48 being spaced from the sensor face 43, not the sensor 42 itself.

Page 7, paragraph [0031], line 4: The term "as" should be deleted.

Page 7, paragraph [0032], line 2: The numeral -- 53 -- should be inserted after the term "embodiment".

Page 7, paragraph [0032], line 10: A -- comma -- should be inserted after the term "housing".

Page 7, paragraph [0032], line 14: A -- comma -- should be inserted after the term "hydrogen".

Page 7, paragraph [0032], line 15: The designation d" should be corrected to read -- d' -- since Figure 2C does not show a designation of d".

Page 7, paragraph [0032], line 16: A -- comma -- should be inserted after the numeral "58".

Page 8, paragraph [0033], line 2: The numeral -- 59 -- should be inserted after the term "embodiment".

Page 8, paragraph [0033], line 8: The term "is" should be deleted.

Page 8, paragraph [0033], line 10: The term "to" should be deleted.

Page 8, paragraph [0034], line 1: A -- comma -- should be inserted after numeral "11"; the term "sensors" should be corrected to read -- sensor --; and the term -- arrangements -- should be inserted after the term "sensor".

Page 10, paragraph [0039], line 1: The term "catalyst" should be corrected to read -- catalysts --.

Page 11, paragraph [0043], line 4: The numeral -- 74 -- should be inserted after the term "separator"; and the term "period" should be corrected to read -- periodic --.

Page 11, paragraph [0043], line 9: The term "is" should be deleted; and a -- comma -- should be inserted after the term "general".

Page 11, paragraph [0044], line 4: The term "and" should be corrected to read -- than --.

Page 11, paragraph [0044], line 9: The numeral -- 74 -- should be inserted after the term "separator".

Page 12, paragraph [0045], line 7: The term "system" should be corrected to read -- sensor arrangement --.

Page 12, paragraph [0045], line 8: The term -- dry -- should be inserted prior to the term "air".

Page 12, paragraph [0047], line 1: The term "another" should be corrected to

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read -- other --; and the term “embodiment” should be corrected to read

-- embodiments --.

Page 13, paragraph [0048], line 1: Reference numeral -- 53 -- should be inserted after the term “arrangement”.

Page 13, paragraph [0048], line 2: Reference numeral -- 51 -- should be inserted after the term “arrangement”.

Page 13, paragraph [0049], line 4: The term “streams” should be corrected to read -- stream’s --.

Page 13, paragraph [0048], lines 5 and 6: A -- comma -- should be inserted after numerals “78” and “80”, respectively.

Page 13, paragraph [0049], line 4: A -- comma -- should be inserted after the term “embodiment”.

Page 13, paragraph [0049], lines 7 and 8: A -- comma -- should be inserted after numerals “78” and “51”, respectively.

Page 13, paragraph [0049], line 10: Reference numeral -- 81 -- should be inserted after the term “orifice”.

Page 14, paragraph [0051], line 6: A -- comma -- should be inserted prior to the term “heat”.

Page 14, paragraph [0052], line 12: The term -- be -- should be inserted after the term “would”. Appropriate correction is required.

Claim Objections

6. Claims 1-4, 8-12, and 61 are objected to because of the following informalities:

Re claim 1, claim lines 6, 7, 9, and 10: The term -- phase -- should be inserted prior to the term "separator".

Re claim 1, claim line 7: The "comma" after the term "and" should be deleted.

Re claim 2, claim line 2: The term -- phase -- should be inserted prior to the term "separator".

Re claim 3, claim line 3: The term -- phase -- should be inserted prior to the term "separator".

Re claim 8, claim lines 1 and 2: The term -- phase -- should be inserted prior to the term "separator".

Re claim 9, claim line 2: The term -- phase -- should be inserted prior to the term "separator".

Re claim 10, claim line 2: The term -- phase -- should be inserted prior to the term "separator".

Re claim 61, claim line 1: The status indicator, -- (Withdrawn) --, of this claim needs to be provided. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-4 and 8-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 1, claim line 9: Which outlet from the second phase separator is the first combustible gas sensor located adjacent? The claim recites that the second phase separator has a first outlet and a second outlet.

Allowable Subject Matter

9. The following is a statement of reasons for the indication of allowable subject matter:

Prior art was not relied upon to reject claims 1-4 and 8-12 because the prior art fails to teach and/or make obvious a system for monitoring combustible gas, comprising fluidly connecting the outlet of a first phase separator with an inlet of a second phase separator; and placing a combustible gas sensor adjacent to an outlet of the second phase separator in combination with all of the remaining limitations of the claim.

10. Claims 1-4 and 8-12 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

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11. Claims 1-4 and 8-12 are objected to, but would be allowable if corrected in accordance with the suggestions made above in paragraph 6.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art to US 5,153,139 (Volz-Thomas et al.) discloses a process whereby the output from a gas separator (2) is used as an input for a second gas separator (7).

The prior art to US 5,578,278 (Fall et al.) discloses a process and apparatus for fluorination of organic substances in inert liquid media, utilizing a separator (6), heat exchangers (67), scrubbers (52, 53), and an oxygen measuring device (56).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Larkin whose telephone number is 571-272-2198. The examiner can normally be reached on 8:00 AM - 5:00 PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Larkin
AU 2856
03 February 2006



DANIEL S. LARKIN
PRIMARY EXAMINER